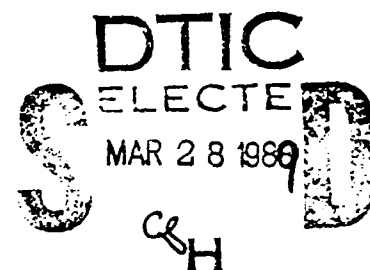


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U.S. NAVY STRATEGY:  
OFFENSIVE STRIKE OR ESCORT?

by

PATRICK T. FENNELL

28 February 1989

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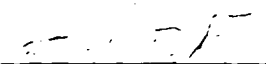
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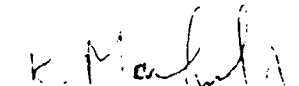
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## U.S. NAVY STRATEGY: OFFENSIVE STRIKE OR ESCORT?

Patrick T. Fennell

What type of Navy should we buy? How should it be employed during war? These questions have been asked since the days of the oared galleons. Ironically, as the answers become more difficult, they become more imperative.

For the United States, the construction and employment of a battle fleet depends as much on perceptions (right or wrong) as it does on actual needs. A current need (actual or perceived) is that the United States must build the type of fleet that will best support the ground war effort in Europe against Warsaw Pact forces.

The Navy's official position is that fleets consisting of big aircraft carriers, like the 90,000 ton Nimitz-class ships, are necessary to enable the United States to strike deep into the waters near the Soviet Union, and destroy its battle fleet before it can reach open water.

Opponents of the Navy's stated requirement for big carriers proffer reasons why they should not be built. Some aver they are too expensive and too vulnerable, others that they do not advance the proper mission of the Navy, which should be to protect the vital shipping link between the United States and Europe. Protecting these sea lanes of communication (SLOC), they argue, is the greatest contribution to the war effort in Europe the U.S. Navy could possibly make. They believe the most effective fleet

for this mission is comprised of ships designed more for escort duty than for power projection. Small carriers which deploy ASW and patrol aircraft would be more appropriate for this task, and less costly.

This paper will show, through historical analogy, that the official Navy position is correct. That is, that large aircraft carriers, capable of destroying the Soviet fleet in home waters, provide the most effective aid to the ground campaign in Europe. Specifically, this paper will use as an example the contributions sea power made to a major land war to show that aggressive strikes against an enemy fleet will bring about more favorable results to the land campaign than would an escort navy. This does not deny, however, that the Navy should also have an escort capability. On the contrary, supplies crossing the ocean during a war must be protected to ensure effective materiel support of allied forces in Europe. The question this paper answers is whether the U.S. Navy should focus on destruction of the enemy's fleet, or protection of shipping, as its primary objective.

During the American Revolution, England's use of sea power to affect the outcome of the land war was analogous in many respects to the situation facing the United States today. It also differed in some respects. These differences, or where similarities end, will be discussed first, to put the subsequent discussion of similarities in context. Next, some general observations will be made concerning the advantages and disadvantages of offensive and defensive strategies with emphasis on convoying, blockading, and destruction of the enemy's fleet.

Finally, lessons derived from the American Revolution will be combined with the observations on strategy to show why the U.S. Navy today must consider the destruction of the enemy's fleet as its primary goal in any war with the Soviet Union. Although England was involved in conflicts over possessions in South Asia, the Mediterranean, and both East and West Indies at the time, this paper is concerned only with what happened in North America. Other areas of conflict are discussed only where they affected the conduct of the war in North America.

The Royal English Navy had a long tradition of unchallenged superiority over the seas. The dominance of British sea power was reflected in the worldwide empire England had established from the Mediterranean Sea to Africa, Asia and both Indies. British sea power was now challenged, however, by an enemy alliance superior in numbers of ships. Too, the distances between England's many far-flung possessions meant that many of them were exposed to enemy attacks while protected by a navy constrained in its ability to strike offensively by the need to spread its scant resources so thinly.

England decided to employ its fleet in a strategic defensive posture, with detachments in every part of the world protecting its interests. Thus English naval strategy was from the start defensive, designed to protect as many as possible of the empire's possessions against the numerically superior allied fleets. As Alfred Thayer Mahan pointed out, this left the English fleet awaiting "attacks which the enemies, superior in every case, could make at their own choice and their own time."

While trying to protect the British Isles, and their possessions in the East and West Indies and North America, the Royal Navy suffered numerous defeats by the French, with the subsequent loss of colonies. The most important of these losses were the thirteen American colonies.

Many significant differences between England's position then and the U.S. position now result from modern technology. Communication times between the British Isles and the remote reaches of the empire were much greater than they are now. Communications between a base and its outposts, such as England and its colonies, then took months. Now they are instantaneous.

The great advantages of steam over sail propulsion are that ships are no longer limited by the wind in the courses they can steer and their speed. The advent of the torpedo and submarine changed naval warfare by creating subsurface dimensions and the demand for new technological capabilities.

Technological advances have changed naval warfare, none more profoundly on the relationship of war at sea to war ashore as the changes brought about by aircraft and missiles. With current technology, submarines and surface-ships operating off European coasts can affect the ground campaign directly in a way which naval forces were unable to do in the past. Sea-launched cruise missiles with large warheads, ranges in excess of 1,000 kilometers, and pinpoint accuracy, can participate in tactical combat ashore. The ability of modern warships to project power ashore may initiate a need to project power from the shore out to the

sea, to counter sea power. Thus, in the correlations of forces affecting land and sea battles, modern warfare may have come full circle. Just as man for centuries has attempted to improve his means of projecting power ashore, he now must devise ways to counter the effect of sea power on shore.

Thus, sea control takes on a new meaning, and greater benefits accrue to whichever side possesses it. If sea control connotes the ability to operate at sea and accomplish one's mission effectively, then sea control for the United States Navy could mean direct participation in the battle in Europe, not just a supporting role.

Another difference between Britain's support of its forces in North America during the Revolution and U.S. support of Allies in Europe today is that the North American continent was very porous then. All the major theaters were bisected by rivers and bays, and the most effective way to move troops and supplies around in the war was by water. Therefore, control of waterways by English or French sea power affected the tactical as well as the strategic outcome of the war.

Europe, even today, is not as accessible by water as the North American continent was for the British. Once supplies are delivered to ports in France, Denmark or Germany, they must be moved inland primarily by rail, canal, or highway. This limits the effect of sea transport on the war to a more strategic role.

The last major difference to be discussed is that the English in 1778 had no clear picture of their options at the



time, as the United States does now. The English faced an assault against their entire empire, of which the North American continent was only a part. To them the only course was to protect their colonies, all of them, lest their empire should crumble. In retrospect, a Royal Navy blockade or defeating the principal threat might have achieved more satisfactory results.

There was no clear-cut choice between one strategy and another for the English. The British attempted to protect the whole empire. (The British did not have such a firm attachment to the colonies on the North American continent as would have made them obviously the most important and most critical object of the Royal Navy's efforts.) They had no choice but to spread out the fleet, leaving small units everywhere, vulnerable to attack by a superior enemy. There was no enemy fleet patrolling North America against which the English fleet needed to fight. There were large enemy fleets which could be blockaded in their ports, but English eyes focused on their colonial possessions, over which the war was being fought.

The most obvious similarity in the effect of sea power upon a ground war between England and her American colonies and the United States today is that in each case they were forced to conduct warfare in distant lands across the sea, most effectively reached, by sea. Just as England was supporting its forces in America, the United States today would have to support theirs in Europe.

Valuable lessons can be drawn from Mahan's analysis of the

role of sea power in the American Revolution. They demand a more complete and precise description of the situation facing the Royal Navy.

Sea power's two essential elements must be described. The first element is the effective use of ports, harbors, bays, rivers, etc., and transit lanes between them. Development of these areas stems from a strong interest in trade. For England in 1778, it consisted of ports in the British Isles and America, and the Atlantic sea lanes over which ships traveled.

The second element of sea power is a fleet in being, capable of ensuring free use of the oceans. For this paper, sea control is defined as the ability to employ these elements effectively to obtain stated goals.

This is where advocates of an escort navy for the United States, with only adjunct aircraft carriers, often leave their argument. Their analysis of how to utilize sea power stops once it is established that the essence of sea power is maintaining control of the sea lines of communication. They establish as their fleets mission assisting soldiers on the ground as effectively as possible, which requires the secure ports and SLOCs. Thus, they feel, the proper objective of the fleet should be to protect the ships as they transit the SLOCs.

As Mahan notes, designating protection of commerce as the sole objective of the fleet is misguided. An enemy's fleet alone can stop a country from achieving it's object at sea, and hence

destruction of the enemy's fleet is the only proper objective of any navy. As Mahan wrote:

"This combination of useful harbors and the conditions of the communications between them constitute, as has been said, the main strategic outlines of the situation. The navy, as the organized force linking the whole together, has been indicated as the principal objective of military effort."<sup>2</sup>

In 1778, the English did not regard the enemy fleets as the principal objective of the Royal Navy. They subdivided their fleet in the hopes of protecting their manifold possessions without focusing on destroying the enemy fleets. Indeed, the enemy fleets were widely scattered and evidence has been adduced that they would have succumbed to a challenge from a superior British fleet. The Royal Navy rarely took the initiative to attack segments of the French and Spanish fleets aggressively. There are, of course, exceptions, but it is apparent that the English, adopting a defensive strategy, committed themselves to being the objects of enemy aggression on a strategic scale, rather than being the aggressors.

Having described England's decision and its poor results, a more acceptable and possibly more successful alternative is suggested.<sup>3</sup> What exactly was the proper course for the English navy, and what might its consequences have been?

As briefly mentioned earlier, England should have realized the full complex of its plight. It could not possibly defend everything when faced by superior forces at times and locations chosen by the enemy. Facing a superior enemy and embarrassed by

the great number of exposed points, it should have been an immediate task to outline priorities for the navy. Had they done so, it is likely that preservation of the American colonies under English rule would have been at the top of the list. They were the jewels of the empire. Other possessions were important to the empire and could be used to divert enemy resources from other areas. Mahan makes the point that Gibraltar was very useful to this end, but should Port Mahon, located near Gibraltar, have been protected so desperately as to drain English resources from other areas? The English faced similar decisions in the East and West Indies. What possessions could be most easily held, which were the most valuable? Having made these decisions, those which could not be held without extreme effort, and were least valuable to England, should have been abandoned to allow for greater concentration of forces where needed.

Having decided upon concentrating forces and establishing the destruction of the enemy fleets as its primary objective, the Royal Navy could pursue their objectives at locations most likely to be productive, their home ports. Blockading ports on the coasts of France and Spain would ensure the English the advantages of mobility, initiative, and accurate intelligence as to the enemy's whereabouts.<sup>4</sup> There were, however, the problems of maintaining close blockades in the face of winter gales. The First Lord of the Admiralty wrote to Rodney,

"It is impossible for us to have a superior fleet in every port; and unless our commanders-in-chief will take the great line, as you do, and consider the king's whole

dominions under their care, our enemies must find us unprepared somewhere, and carry their point against us."5

History shows that had England adopted a naval strategy of concentrated offensives against the enemy fleets it might well have retained possession of and control over its valuable North American colonies. Continual retreats and refusal to oppose the offensive against the enemy left the outcome more to chance than choice.

Several events prior to the surrender of Lord Cornwallis at Yorktown show quite clearly that advantages could have been gained by the English by concentrating its naval forces, which, if properly executed, may have saved North America for the British.

Rodney, the English naval commander in the West Indies, had a fleet superior in numbers to the combined allied French and Spanish fleets after the departure of the French commander, De Guichen, for France with fifteen ships. Rodney, concerned that De Guichen may have been headed for the North American continent, and apprehensive about leaving the West Indies unprotected, divided his forces in half. Mahan noted,

"The risk thus run was very great, and scarcely justifiable; but no ill effect followed the dispersal of forces. Had De Guichen intended to turn upon Jamaica, or, as was expected by Washington, upon New York, neither part of Rodney's fleet could well have withstood him. Two chances of disaster, instead of one, were run, by being in small force on two fields instead of in full force on one."6

The incident took place in September 1780.

The previous July, French reinforcements totaling five thousand troops, under the command of Rochambeau, and seven ships-of-the-line, under the command of De Ternay, reached the American coast. Rodney had superior naval forces when he arrived at New York, avoided an opportunity to attack the seven French ships in Newport, and returned to the West Indies in October.

"Why ... when the departure of De Guichen for Europe left Rodney markedly superior in numbers during his short visit to North America, from September 14 to November 14, should no attempt have been made to destroy the French detachment of seven ships-of-the-line in Newport? These ships had arrived there in July; but although they had at once strengthened their position by earthworks, great alarm was excited by the news of Rodney's appearance off the coast. A fortnight passed by Rodney in New York and by the French in busy work, placed the latter, in their own opinion, in a position to brave all the naval force of England."7

Although the French expressed feelings of invulnerability after fortifying their position in Narragansett Bay, there were differing opinions expressed by contemporary English sailors. One of these claimed that an English attack of twenty ships upon the French seven would undoubtedly have succeeded.

"In the opinion of a distinguished English naval officer [Sir Thomas Graves] of the day closely familiar with the ground, there was no doubt of the success of an attack; and he urged it frequently upon Rodney, offering himself to pilot the leading ship."8

Rodney's failure to attack the enemy's fleet, when he outnumbered them by almost three-to-one, is symptomatic of the

lackadaisical attitude of the English at the time. Having adopted a defensive strategy from the beginning, the English admirals became inured by it, and failed to focus on their only true objective, the enemy fleet. Mahan wrote,

"It is not, however, merely as an isolated operation, but in relation to the universal war, that such an attempt is here considered. England stood everywhere on the defensive, with inferior numbers. From such a position there is no salvation except by action vigorous almost to desperation... Attacks which considered in themselves alone might be though unjustifiable, were imposed upon English commanders. The allied navy was the key of the situation, and its large detachments, as at Newport, should have been crushed at any risk. The effect of such a line of action upon the policy of the French government is a matter of speculation, as to which the present writer has no doubts; but no English officer in chief command rose to the level of the situation, with the exception of Hood, and possibly of Howe. Rodney was now old, infirm, and though of great ability, a careful tactician rather than a great admiral."9

Following Rodney's failure to engage the French detachment at Newport, and his subsequent return to the West Indies, French reinforcements arrived in the West Indies. After minor action between English Admirals Rodney and Hood and the French commander Comte de Grasse, the latter received a despatch from Generals Washington and Rochambeau "upon which he was to take the most momentous action that fell to any French admiral during the war."<sup>10</sup>

The fatal blow for England was to take place at Yorktown, on the shores of the Chesapeake Bay. It emphasized the premier importance of sea power in the final outcome. Mahan quotes the

English commander-in-chief, Sir Henry Clinton, as he said, "Operations on the Chesapeake are attended with great risk unless we are sure of a permanent superiority at sea. I tremble for the fatal consequences that may ensue." For Cornwallis had taken matters into his own hands and decided the next action should take place on the Chesapeake, a location which he thought the "proper seat of war".<sup>11</sup>

Lord Cornwallis was instructed by Clinton to occupy Yorktown, on a peninsula in the Chesapeake between the York and James Rivers, and enclosed by water on three sides. It was now up to the allied armies in New York to march to Yorktown and cut off Cornwallis' only dry escape route, while the allied navies fought the English for control of the seaward approaches to Yorktown. Control of the sea in and around the Chesapeake Bay was crucial to the outcome of the war. French superiority in numbers, 24 ships to the English 19, enabled them to harass the English fleet outside of the Chesapeake while De Barras, with more French ships, sailed undetected into the Chesapeake and anchored. De Grasse broke off his holding actions against the English and, sailing his nineteen ships into the bay, secured firm control of the sea for the allies and eventually forced the surrender of Cornwallis.

It must be noted that the seven French ships which Rodney could have engaged in battle might easily have made the difference in the conflict for control of the Chesapeake. The English, with better numerical odds, might have been able to fend off the French, secure the Chesapeake, and protect Cornwallis'



retreat: or keep him supplied for a counterattack as required.

The role played by superior naval forces, resulting in control of the sea, was a major determinant in the outcome of the American Revolution. There is no better testament to this than the letters and proclamations of George Washington:

"In any operation, and under all circumstances, a decisive naval superiority is to be considered as a fundamental principle, and the basis upon which every hope of success must ultimately depend."12

He also stated:

"Next to a loan of money, a constant naval superiority upon these coasts is the object most interesting. This would instantly reduce the enemy to a difficult defensive ... Indeed, it is not to be conceived how they could subsist a large force in this country, if we had the command of the seas to interrupt the regular transmission of supplies from Europe. This superiority, with an aid in money, would enable us to convert the war into a vigorous offensive. With respect to us it seems to be one of two deciding points."13

Note that Washington, in his infinite wisdoms, emphasizes the importance of naval superiority, rather than merely safe escort for his transports!

It is also important to note that, although the Americans and French defeated the English on the North American continent, they did so by the narrowest of margins. Numerous threats of defeat were overcome only by slight changes of luck, opinions, actions, or combinations thereof. That the allies did not achieve a decisive victory easily, even though the commerce-destroying efforts of allied navies and American privateers for inflicted

great casualties on English commerce, demonstrates the triviality of commerce-destroying as a primary naval strategy. Indeed, as Mahan remarked, "the lack of effect commerce-destroying had on the general outcome of the whole war shows "strongly the secondary and indecisive effect of such a policy upon the great issues of war."

Commerce-destroying against a sea power like the United States can affect the nation, but in war it can rarely, if ever, overcome the ability of that nation to replace its losses and strike back at the enemy. As Mahan reflected,

"Where the revenues and industries of a country can be concentrated into a few treasure-ships, like the flota of Spanish galleons, the sinew of war may perhaps be cut by a single stroke; but when its wealth is scattered in thousands of going and coming ships, when the roots of the system spread wide and far, and strike deep, it can stand many a cruel shock and many a goodly bough without the life being touched. Only by military command of the sea by prolonged control of the strategic centers of commerce, can such an attack be fatal; and such control can be wrung from a powerful navy only by fighting and overcoming it.<sup>14</sup>

This is why the United States Navy must be able to challenge the Soviet fleet, and destroy it in battle. Only by maintaining that capability can U.S. sea power support the European front decisively.

This historical episode demonstrates several lessons applicable to present day navies. It offers lessons which can be applied by the U.S. Navy in battles against the Soviets in Europe. The inutility of commerce-destroying and defensive

postures, as primary objectives of the fleet will be documented, as will the positive effects indeed the necessity of choosing destruction of the enemy fleet as the primary objective.

In the American Revolution, two decisive factors were determined the outcome in favor of the French and the Americans. First, was the English attempt to protect everything, relegating the Royal Navy to a purely defensive role, destined to be outnumbered when they met the enemy. Second, was the Royal Navy's failure to agree that their primary objective was to destroy the enemy fleets.

For the U.S. Navy to adopt convoying as its primary function in wartime might well invite disaster. As long as an opposing fleet exists somewhere with significant offensive capability, the U.S. Navy must be prepared to attack that fleet, with sufficient offensive power to defeat.

To assign the U.S. fleet an escort role in the face of a potent enemy fleet would mean that it, like England's during the American Revolution, would be subject to attacks at times and places of the enemy's choosing, with numbers and fire-power favorable to the enemy.

America's coastline, though not a likely target of the Soviet navy, would nevertheless be difficult to protect if the Soviets chose to harass them as an objective of their fleet. It has already been suggested how much technology has favored projection of power ashore. Without strong offensive fighting ships capable

of defeating a large Soviet fleet our coastlines may be left open.

The English experience bears some testimony to this point. The French and Spanish fleets kept the Royal Navy in check throughout most of the war. The Channel fleet was driven into port numerous times, and Gibraltar saved from starvation and defeat only by the ineptitude of its besiegers. Under the circumstances, it is conceivable that the French and Spanish could have succeeded in landing troops on English soil had they made a concentrated, coordinated effort.

Failure of the U.S. Navy to attack the enemy fleet, with equal or superior forces might also leave commercial shipping, vital convoys to Europe, and the ports they use, open to enemy attack. Control of the sea being a fleeting impermanent affair, a large Soviet naval force could descend on the European coast, mauling shipping and harbors, maintaining temporary but adequate control wherever they went. In short, if the United States has no fleet capable of defeating them, they may impose their will when and where they choose. The U.S. Navy would lose the ability to effect the ground directly, and quite possibly the Soviet Navy would use their ability to do so very effectively, with disastrous consequences.

The Soviet ability to impose control of the sea in specific area could impose difficulties for the U.S. to support Europe. Failure to resupply our allies in Europe could result in termination of the NATO alliance and the war, on terms immensely

favorable to the Soviet Union.

Thus, the United States Navy must be capable of destroying any enemy fleet, for, only by doing so can the threat of a Soviet fleet imposing its itinerant will upon our vital SLOCs, harbors, and coastal areas be eliminated.

## NOTES

1. Mahan, A. T., The Influence of Sea Power Upon History 1660-1783. Little, Brown and Company, Boston, 1980, p. 393.
2. Ibid., p. 521.
3. Ibid., p. 393.
4. Ibid., pp. 325-327.
5. Ibid., p. 396.
6. Ibid., pp. 381-382.
7. Ibid., p. 394.
8. Ibid., p. 396.
9. Ibid., pp. 396-397.
10. Ibid., p. 384.
11. Ibid., p. 385.
12. Ibid., p. 397.
13. Ibid., p. 398.
14. Ibid., pp. 539-540.

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